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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,137	11/04/2005	Sergei Levchik	1321-18 PCT US	8471
28249	7590	05/25/2007	EXAMINER	
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. SUITE 702 UNIONDALE, NY 11553			SELLERS, ROBERT E	
			ART UNIT	PAPER NUMBER
			1712	
			MAIL DATE	DELIVERY MODE
			05/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/534,137

Applicant(s)

LEVCHIK ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 22 November 2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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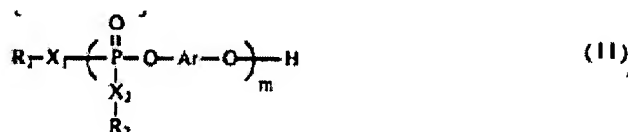
1. The obviousness-type double patenting rejections over copending application no. 10/491,690 in view of Levchik et al. Publication No. 2005/0020800 as well as the Levchik et al. publication in view of Nagase et al. Patent No. 5,945,222 have been applied in the non-Final rejection mailed November 27, 2006 on pages 2-4 are rescinded. The amendment filed May 10, 2007 in the Remarks section on page 5, lines 18-19 states that "[b]oth the subject application and Levchik et al. were subject to an obligation of assignment to the same organization at the time the presently claimed invention was made." Thus, the Levchik et al. publication is no longer available as prior art as established in MPEP § 706.02(l)(1), I. Common Ownership or Assignee Prior Art Exclusion Under 35 U.S.C. 103(c).

2. The curing agent has been limited to a hydroxy-terminated oligomeric phosphonate curing agent comprising the repeating unit $OP(=O)(R)-O-Arylene$ as described on page 3, lines 19-32 of the specification. (PCT Publication No. WO 03/029258 described on page 3, lines 17-21 is an equivalent of the Levchik et al. publication mentioned hereinabove.) Accordingly, the 35 U.S.C. 103(a) rejections over Japanese Patent No. 2001-19746 and Japanese Patent No. 2001-302879 in view of Levchik et al., Japanese '746 or Fearing Patent No. 4,268,633 are withdrawn as explained on page 6, paragraph 12 of the non-Final rejection.

The text of section 103(a) of Title 35, U.S. Code not included in this action can be found in the non-Final rejection.

Claims 1-5, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 2002-88138 (Japanese '138).

3. Japanese '138 (translation, page 2, paragraph 7) discloses a blend of an epoxy resin, from 0.1 to 10% by weight (page 8, paragraph 42, the last two lines) of an aromatic phosphonic acid ester of formula (II) depicted on page 4, paragraph 19



wherein the right-hand moiety represented as $\text{R}_1\text{-X}_1\text{-}$ corresponds to claimed moiety "OP" since $\text{-X}_1\text{-}$ includes -O- , and the substituent $\text{-X}_2\text{-R}_2$ corresponds to claimed substituent "P(R)" since $\text{-X}_2\text{-}$ includes a direct bond and -R_2 is an alkyl group; a curing agent (col. 9, paragraph 50) and an inorganic filler (page 9, paragraph 51).

4. Although the species of aromatic phosphonic acid ester wherein $\text{-X}_2\text{-}$ is a direct bond and -R_2 is an alkyl group as claimed is not exemplified, it is clearly within the purview of formula (II). It would have been obvious to employ such as phosphonic acid ester based on the equivalency between it and the exemplified species embraced by formula (II).

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Claims 6-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese '138 further in view of Japanese Patent No. 2001-302879 (Japanese '879)

Japanese '138 is open to the use of curing agents in general, although the claimed amount and type of curing agent and proportion of inorganic filler are not recited.

5. Japanese '879 (CAPLUS abstract, mentioned on page 3, lines 5-10 of the instant specification as describing the claimed inorganic filler, co-curing agent and polybenzoxazine) exemplifies a composition comprising an epoxy resin, 21.2% by weight of a phosphorus-containing phenol novolak resin, 21.2% by weight of an aluminum hydroxide inorganic filler (alumina is disclosed on page 3, paragraph 11), and 25.5% by weight of a polybenzoxazine and 10.6% by weight of a phosphorus compound.

6. It would have been obvious to employ the phosphorus-containing phenol novolak resin of Japanese '879 as the curing agent of Japanese '138 in order to enhance the fire retardancy (page 2, paragraph 8, lines 2-6).

7. It would have been obvious to use the inorganic filler of Japanese '138 as the level of 21.2% by weight exemplified in Japanese '879 in order to optimize the fire retardancy (page 3, paragraph 11).

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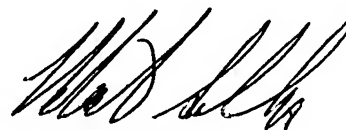
Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese '879 in view of Japanese '138.

8. The references are described in previous paragraphs 3-5. Japanese '879 is open to phosphorus compounds in general. It would have been obvious to utilize the aromatic phosphonic acid ester of Japanese '138 as the phosphorus compound of Japanese '879 in order to impart stability and water resistance (Japanese '138, page 8, paragraph 40).

9. The attached Notice of References Cited, Form PTO-892 contains references cited in related application no. 10/491,690.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



Robert Sellers
Primary Examiner
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